

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Original): A method of electropolishing a metal layer formed on a wafer, the wafer having a center portion and an edge portion, the method comprising:

aligning a nozzle and the wafer to position the nozzle adjacent to the center portion of the wafer;

rotating the wafer; and

as the wafer is rotated, applying a stream of electrolyte from the nozzle onto a portion of the metal layer adjacent to the center portion of the wafer to begin to electropolish the portion of the metal layer with a triangular polishing profile to initially expose an underlying layer underneath the metal layer at a point.

Claim 2 (Original): The method of claim 1, wherein the metal layer includes copper, and wherein the underlying layer is a barrier layer.

Claim 3 (Original): The method of claim 1, further comprising:

after the underlying layer has been initially exposed at a point, applying the stream of electrolyte from the nozzle onto additional portions of the metal layer extending from the center portion toward the edge portion of the wafer; and

adjusting the triangular polishing profile to have a flatter apex when the stream of electrolyte is applied to the additional portions of the metal layer.

Claim 4 (Original): The method of claim 3, wherein adjusting the triangular polishing profile comprises:

applying a first polishing current to the stream of electrolyte when the stream of electrolyte is applied to the portion of the metal layer adjacent to the center portion of the wafer; and

applying a second polishing current, which is higher than the first polishing current, when the stream of electrolyte is applied to the additional portions of the metal layer.

Claim 5 (Original): The method of claim 3, wherein adjusting the triangular polishing profile comprises:

applying the stream of electrolyte using a first nozzle when the stream of electrolyte is applied to the portion of the metal layer adjacent to the center portion of the wafer; and

applying the stream of electrolyte using a second nozzle, which is larger than the first nozzle, when the stream of electrolyte is applied to the additional portions of the metal layer.

Claim 6 (Original): The method of claim 1, wherein the wafer and the nozzle are not moved in a lateral direction when the stream of electrolyte is applied to the portion of the metal layer adjacent to the center portion of the wafer until the underlying layer is initially exposed at a point.

Claim 7 (Original): The method of claim 6, wherein, when the underlying layer is initially exposed at a point, the wafer or nozzle is moved in a lateral direction to apply the stream of electrolyte to additional portions of the metal layer extending from the center portion toward the edge portion of the wafer.

Claim 8 (Original): The method of claim 1, wherein aligning a nozzle adjacent to the center portion of the wafer comprises:

moving the wafer to align the center portion of the wafer adjacent to the nozzle.

Claim 9 (Original): The method of claim 1, wherein aligning a nozzle adjacent to the center portion of the wafer comprises:

moving the nozzle to align the center portion of the wafer adjacent to the center portion of the wafer.

Claim 10 (Original): The method of claim 1, wherein aligning a nozzle adjacent to the center portion of the wafer comprises:

moving the nozzle and the wafer relative to one another to align the nozzle adjacent to the center portion of the wafer.

Claim 11 (Original): A system to electropolish a metal layer formed on a wafer, the wafer having a center portion and an edge portion, the system comprising:

 a wafer chuck to rotate the wafer; and

 a nozzle,

 wherein the nozzle and the wafer are aligned to position the nozzle adjacent to the center portion of the wafer, and

 wherein, as the wafer is rotated, a stream of electrolyte is applied from the nozzle onto a portion of the metal layer adjacent to the center portion of the wafer to begin to electropolish the portion of the metal layer with a triangular polishing profile to initially expose an underlying layer underneath the metal layer at a point.

Claim 12 (Original): The system of claim 11, wherein the metal layer includes copper, and wherein the underlying layer is a barrier layer.

Claim 13 (Original): The system of claim 11,

 wherein, after the underlying layer has been initially exposed at a point, the stream of electrolyte is applied from the nozzle onto additional portions of the metal layer extending from the center portion toward the edge portion of the wafer, and

 wherein the triangular polishing profile is adjusted to have a flatter apex when the stream of electrolyte is applied to the additional portions of the metal layer.

Claim 14 (Original): The system of claim 13, further comprising a power supply configured to:

 apply a first polishing current to the stream of electrolyte when the stream of electrolyte is applied to the portion of the metal layer adjacent to the center portion of the wafer; and

 apply a second polishing current, which is higher than the first polishing current, when the stream of electrolyte is applied to the additional portions of the metal layer.

Claim 15 (Original): The system of claim 13, wherein the nozzle comprises:

 a first nozzle configured to apply the stream of electrolyte when the stream of electrolyte is applied to the portion of the metal layer adjacent to the center portion of the wafer; and

a second nozzle configured to apply the stream of electrolyte when the stream of electrolyte is applied to the additional portions of the metal layer, wherein the second nozzle is bigger than the first nozzle.

Claim 16 (Original): The system of claim 11, wherein the wafer and nozzle are not moved in a lateral direction when the stream of electrolyte is applied to the portion of the metal layer adjacent to the center portion of the wafer until the underlying layer is initially exposed at a point.

Claim 17 (Original): The system of claim 16, wherein, when the underlying layer is initially exposed at a point, the wafer or nozzle is moved in a lateral direction to apply the stream of electrolyte to additional portions of the metal layer extending from the center portion toward the edge portion of the wafer.

Claim 18 (Original): The system of claim 11, further comprising a guide rod configured to move the wafer to align the center portion of the wafer adjacent to the nozzle.

Claim 19 (Original): The system of claim 11, further comprising a guide rod configured to move the nozzle to align the center portion of the wafer adjacent to the center portion of the wafer.

Claim 20 (Original): The system of claim 11, further comprising:
a first guide rod configured to move the nozzle; and
a second guide rod configured to move the wafer.

Claims 21-87 (Canceled).